

# The Road to Oral Health Equity in North Carolina

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## Welcome

Sarah Tomlinson, DDS • State Dental Director, Oral Health Section Chief

Here's hoping you enjoy the Oral Health Section's *second oral health equity newsletter!* This newsletter is meant to share the work of North Carolina's experts working to improve oral health for those who need it the most. Our dental public health programs cover the lifespan, including both children and adults. Last year, we launched a program for pregnant women and this year we have begun to collaborate in a new program for people living with Human Immunodeficiency Virus (HIV). Healthcare providers are working to create systems of care in which oral health is addressed in the care continuum for people living with HIV.

Many of you may know that the country is facing a crisis around the misuse of opioids. The NC dental community is addressing the issue in a number of ways. Most recently, the NC Dental Opioid Workgroup has developed educational materials highlighting the message that over the counter medications often work better than those that require a prescription. Dentists can personalize the patient brochure to include the location of a nearby Drop Box for expired or unused medications.

Community water fluoridation (CWF) and telehealth services have been around for a while, and our newsletter articles emphasize how both can be used to address health equity. CWF, assuring small amounts of the mineral fluoride is in the community's water supply, is a cost-effective and equitable public health service that reduces dental decay by as much as 40%! Teledentistry, using the tools of modern technology to support dental care, is being researched by the East Carolina University School of Dental Medicine. Their project is focused on linking dental providers to their community medical teams and support services.

Not only has there been a lot of talk in the dental community about the items above, but there has also been great discussion about the current rules change before the NC Board of Dental Examiners around 16W. The proposed rule would allow Public Health Dental Hygienists to work with dental assistants and not require a prior dental exam in areas considered to be health professional shortage areas. This rule change supports oral health equity by removing a number of barriers to care. In the areas that struggle with access to care the most, a dentist will no longer be required for exams prior to a dental hygienist offering preventive services. This, and the fact that the hygienists can work with an assistant, are cost-effective strategies that allow dental providers to expand their services further into communities that need it the most. These are great steps toward increasing access, improving outcomes and working toward oral health equity!



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**  
Office of Minority Health  
and Health Disparities



# East Carolina University and Tele-dentistry: Using Technology to Advance Integrated Care

Mark Moss, DDS, PhD and Allison Tempel, BS, MPH(c) • ECU School of Dental Medicine

Many rural communities experience health disparities and addressing them requires removing barriers to care. A Health Resources and Services Administration (HRSA) project conducted by the Department of Family Medicine at East Carolina University's (ECU) Brody School of Medicine is using technology tools to support health care in rural school settings. This is an example of an innovation to address health equity.

Did you know that tele-dentistry is not a new concept? Dentists have been consulting with each other for years. If ever a dentist placed a **telephone** call to the specialist down the street to ask about a patient's needs, that consult was, in fact, using technology to address a health need: **teledentistry!** Taking educational courses via the Internet and even collecting health information using the tools of technology are components of modern telehealth services.

While much of the teledentistry conversation is around how a dentist can expand services out into his or her community, ECU is focused on improving linkages between physicians, dentists, and their community services. It is necessary that providers work together to address whole-person health. To that end, ECU School of Dental Medicine (SoDM) is partnering with ECU's Brody School of Medicine in their work with the Duplin County School System to explore ways technology can support interprofessional collaboration. The concept has four strategies that cover provider communication, continuing education, and both data collection and visualization.

1. Strategy one is based on using technology that supports communication between the medical and dental provider teams to make referrals for care.
2. The second strategy uses e-learning tools to teach providers ways they can connect patients needing care to

existing community resources and programs.

3. The third strategy will use community events (such as health fairs and open houses) to collect data and identify the best ways to share oral health messages.
4. Strategy four consists of a provider dashboard or tracking system that will highlight dental needs.

Overall, the ECU telehealth project will explore multiple ways technology can make connections – between dentists and school nurses and county health departments and local support services – strengthening the local safety net system. This innovative pilot will use telehealth tools for training, data collection and provider communication to integrate oral health into primary care, increase the capacity of safety net providers, and improve oral health literacy, all of which are strategic initiatives endorsed by the Oral Health Section of NC Department of Health and Human Services.



# NC Efforts to Improve the Oral Health of People Living with HIV/AIDS

North Carolina Oral Health Section, NC Department of Health and Human Services

Today, people with Human Immunodeficiency Virus (HIV) are living longer and healthier lives, but new HIV diagnoses continue to occur with more than half of new diagnoses concentrated in the southern region of the United States.

Unfortunately, oral health care is one of the greatest reported unmet needs among people living with HIV/AIDS, creating a challenge and opportunity for public health programs and health care organizations. People living with HIV/AIDS may not have regular dental care due cost, stigma, and limited awareness of the impact oral health has on overall health.

According to the Health Resources and Services Administration (HRSA), nearly half

of all people living with HIV/AIDS will have problems in the mouth or the head/neck region. In addition to diagnosing and treating oral conditions and diseases, dentists and dental hygienists can help engage patients in regular HIV medical care and address issues like smoking and nutrition.

Last fall, the North Carolina Department of Health and Human Services and the University of North Carolina at Chapel Hill convened an interprofessional task force to improve the oral health of people living with HIV/AIDS in the state. The task force launched in September 2019, bringing together nearly 50 of North Carolina's dental providers, medical providers, deans, professors, program managers,

and community stakeholders. Attendees discussed the current science of HIV and strategies for creating a sustainable collaborative practice model for the state. Specifically, task force members discussed combating HIV-related stigma, the need for increased communication and collaboration between dentistry and medicine, new funding sources, and provider guidelines for treatment and referral.

Over the next 12 months, the task force members will continue their work to improve access to high-quality oral health care for this population. The initiative is inspired, in part, by national efforts to include oral health services in primary care settings and the overall HIV care continuum.

## Managing Pain After Dental Treatment

North Carolina Oral Health Section, NC Department of Health and Human Services

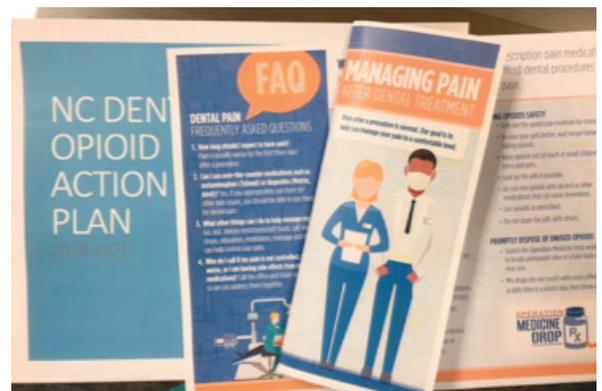
Opioids, prescription pain medications and illicit drugs are destroying lives in North Carolina and across the nation. In 2017, opioid-related deaths in NC increased 34% from the year before. The More Powerful Campaign, led by NC Attorney General Josh Stein and NC Department of Health and Human Services Secretary Mandy Cohen, has raised awareness about the opioid crisis and shown that we can all help play a part in ending the epidemic. This campaign is one of many state efforts to combat the opioid problem, and as a result, North Carolina saw a 5% decrease of unintentional opioid deaths in 2018 and a 24% decrease in the number of opioid prescriptions dispensed from 2017 to 2019.

North Carolina's Dental Opioid Workgroup, led by the NC Oral Health Section in partnership with the NC Dental Society and the Department of Justice – More Powerful Campaign, launched a patient education brochure entitled “*Managing Pain After*

*Dental Treatment.*” The brochure includes opioid facts including side effects, risk of addiction, safe use and disposal. Patients experiencing dental pain can expect their dentist to discuss this brochure with them and introduce customized opioid-free pain management options. Most patients will not need prescription medications to treat their dental pain. In many cases, a dentist can recommend a schedule of over the counter medications such as ibuprofen (Motrin) and/or acetaminophen (Tylenol) which can even be more effective than opioids. The brochure can be found here: [www.ncdhhs.gov/opioids](http://www.ncdhhs.gov/opioids).

If you are experiencing dental pain, seek care from a dental provider, and ask them about safe and effective ways to manage your pain without the use of

opioids. If you, a friend, or a family member need help with an opioid problem, visit [www.ncdhhs.gov/about/department-initiatives/opioid-epidemic](http://www.ncdhhs.gov/about/department-initiatives/opioid-epidemic) or [www.morepowerfulnc.org/get-help/](http://www.morepowerfulnc.org/get-help/) to find help and treatment resources near you. The *Operation Medicine Drop*, a North Carolina specific website provides safe and secure ways to dispose of unused opioids. Please visit the website to find a Permanent Drop Box near you.



# Community Water Fluoridation – Taking Care of All of Us

Tim Wright DDS, MS • University of North Carolina at Chapel Hill • Adams School of Dentistry

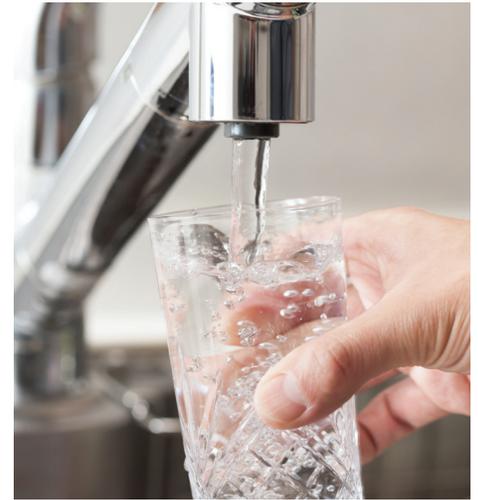
Fluoride has been used to fight cavities since the 1800s and is considered one of public health's 10 greatest achievements! In the early 1900s, investigators found that water with natural fluoride was associated with less dental decay. Since then, community water fluoridation has been evaluated in multiple studies that further demonstrate its safety and cavity-fighting properties.

Charlotte, North Carolina became the second largest city in the nation and first city in the state to adopt water fluoridation (1949). Since then, community water fluoridation (CWF) has spread across the United States. In 2001, Surgeon General David Satcher declared community water fluoridation to be the most cost-effective, practical and safe means for reducing tooth decay in a community. In North Carolina, over 88% of individuals drinking from local water systems receive the benefits of fluoride.

The current recommendation from the Department of Health and Human Services and Centers for Disease Control and Prevention is that water have 0.7 parts per million fluoride. This small amount of fluoride has been shown to reduce tooth decay by as much as 20 to 40 percent and is credited with much of the decline in cavities seen over the past 70 years. CWF supplies fluoride at a very low dose while greatly reducing cavities. Drinking water is available to most, if not all, residents of a community regardless of income, educational status, age, or other factors. Fluoridated tap water is readily available and costs little, making it the most cost-efficient method to prevent dental decay.

Unfortunately, for some, Community Water Fluoridation is controversial. Some oppose it for infringement on personal rights and others due to concerns about its safety. Fluoride is the 13th most common element on earth and is present in many foods, beverages and in natural ground water. Fluoride is incorporated in many oral hygiene products (toothpastes) to strengthen teeth, and they are virtually all known to be effective.

In 2016, US Surgeon General Vivek Murthy stated, "Water fluoridation is the best method for delivering fluoride to all members of the community, regardless of age, education, income level or access to routine dental care. Fluoride's effectiveness in preventing tooth decay extends throughout one's life." Dr. Murthy went on to recognize the community leaders that have fought to make water fluoridation a reality across the nation. Seventy years after the birth of community water fluoridation, our leaders continue to work to help ensure that the public benefits from having optimal and safe levels of fluoride in their drinking water.



# Dental Public Health Influencers: Q and A with Deana Billings, Wilkes Public Health Dental Clinic

Sarah Tomlinson, DDS • State Dental Director, Oral Health Section Chief

## **1. Deana, you have become a lead influencer in public health dentistry in North Carolina. Can you share the origin of your commitment to improving oral health?**

In 1996, I became involved with a group of individuals who were seeking to resolve the number one issue identified in the Wilkes County Community Needs Assessment: unmet dental health care needs. I worked on a dental task force and then served on the Wilkes Dental Consortium, Inc. At the time, I was Director of the Wilkes Community College Dental Assisting Program. Our on-campus dental clinic was serving a limited number of low-income adults and children, but much

more was needed in our county. I, along with other stakeholders in the community and beyond, started working toward opening a public health dental clinic. Once the clinic was operational and we were about to hire our second full-time dentist, I decided it was time for me to leave education and pursue management of the dental clinic with a desire to make a real impact on the dental needs for our county. After we began the Public Health Dental Clinic, insight to the dental

needs that were not being met, and all the obstacles that patients had to overcome to get care was astonishing. This instilled in me a passion to change things not just in Wilkes, but everywhere in the state. I also wanted others to understand the hardship in trying to solve dental public health issues. I became a voice for the underserved and for public health dental clinics where ever I had an audience.

## **2. One of the guiding principles in public health is reducing disparities in health care. What have you identified as the gap in care that you and your team are addressing in Wilkes? How is that working? What will success look like?**

Wilkes County has the largest land mass in North Carolina and nearly 20% of our population lives in poverty. Consequently, one of the major obstacles in our county is transportation, especially in our low income population. Early in our history, the Rotary Club provided a grant to pay for public transportation for the working poor. During our first year of operation, we were pleasantly surprised with a private donation that provided a mobile dental clinic. Again in 2014, largely due to our previous success, we received a grant award from the Golden Leaf Foundation in excess of what was originally requested. Instead of overhauling our existing Mobile Clinic, we received enough money to purchase a new truck. The Health Foundation, Inc. provided additional funds to equip it. With this new Mobile Dental Clinic, we can meet our citizens where they are to provide services at the schools, rural health centers, and at several other locations in the community.

Our success is providing dental care to children or adults regardless of income. We have a sliding fee scale for the

low-income or working poor and an emergency fund for those who need additional help to cover the emergency care. Thankfully, we have received

assistance from Delta Dental and the Health Foundation, Inc. to cover the cost. We have also had many private citizens sponsor dental care for others.



**3. Public health professionals want to advance healthcare solutions that support patients, families and their medical and dental providers. How does that idea manifest at Wilkes Public Health Dental Clinic?**

About 10 years ago, the dental clinic was approached by Project Lazarus to partner with the local hospital and other health providers to be a referral source for patients with dental pain instead of prescribing narcotics/opioids. Dentists at our clinic have always limited the narcotic prescriptions to no more than three days, but once approached we went even further by starting a once a week "Emergency Clinic" for adults. That works on a first come, first serve basis. Patients do not have to be a patient of record; they just need to come to the clinic and sign

in. There is a flat fee charged to have a tooth removed regardless of income. We average serving approximately five patients per week, but has been as high as 12. Our dental providers also use Onset, which is a buffer solution for the anesthetic, which allows the patient to feel the effects of anesthetic even when they are slightly swollen from an abscess. This is beneficial because the patient can receive treatment that day versus being put on antibiotics and additional narcotics. *We tackled the Opioid problem before it ever became a national issue.*

Wilkes County has seen a reduction on ED visits and opioids prescribed.

We also work with the Federally Qualified Health Center to provide dental care for the working poor referred to the dental clinic for routine care. Unfortunately, out of desperation in trying to find a dental provider in their area, we treat patients who drive one to three hours to our clinic. We have agencies from other counties who call to set up appointments for their clients as well.

**4. Wilkes Public Health Dental Clinic has stepped beyond the established public health system for an alternative solution to access to dental care. Can you briefly review the genesis of your clinic and how it works? What has the success of your dental clinic shown you and your team about overcoming obstacles that you can share with our readers?**

The Wilkes Public Health Dental Clinic focuses on the dental needs across the life spectrum. We see kids as early as six months up to adults over 100 years old in our Fixed Site or Mobile Clinics. Our main goal is to provide treatment where needed, but we are just as committed to prevention and education. Our team conducts dental screenings in daycares, public schools, and nursing facilities and we also host a community dental health fair each February. The staff participate in many community activities that promote good overall health in

collaboration with other non-profit agencies. We strive to find who is not receiving dental services and try to eliminate barriers in order to get patient into care. Our staff work together to overcome every challenge that we are presented with. If we need help we seek guidance from other clinics in the state or those in the public health field and vice versa. We value dental public health and want to share our failures and successes with others. It has been this open sharing that has helped us continue to improve and expand what we do. I have been

questioned, "Why doesn't the dental clinic just focus on providing dental care rather than trying to do so many other things?" My answer is "we are public health and this public health dental clinic has to do it all because there is no one else to carry the responsibility." I am grateful to have a staff of dentists, public health dental hygienists, certified dental assistants, experienced receptionists, and an interpreter who understands this and is committed to making a difference in our community and the lives of the patients we serve.

